

Forage Yield, Nutritive Value and Growth Pattern of Five Native Warm Season Grasses

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There is little forage yield and nutritive information available for native South Texas warm season grasses. This information is needed to strengthen the USDA/NRCS efforts to document these grasses and promote their use as native forage sources for Texas ranchers. Many of the grass species currently used by ranchers are introduced species. This study should provide helpful information to ranchers so that they can make informed decisions about native forages.

In the spring of 2007 five native grasses were chosen for analysis; shortspike windmillgrass, plains bristlegrass, multiflowered false Rhodesgrass, silver bluestem, and pink pappusgrass. Seed of these species was collected from South Texas and then sown in pots in the greenhouse at the Kika de la Garza Plant Materials Center. These plants were then transplanted into 4 replicated plots at the Texas Agricultural Experiment Station at Stephenville. Each plot is subdivided into eight quadrants. Monthly clippings will be randomly assigned to each quadrant from April through November. Yield response to fertility, growth patterns, and nutritive values will be studied for each species of grass. Nitrogen and in- vitro dry matter digestibility will be measured. In-vitro dry matter digestibility will be determined using the Daisy II Incubator with rumen fluid from goats or cattle.

The results of this study should provide needed information for Forage Suitability Group Descriptions, Ecological Site Information, Nutritional Balance Analyzer and other

NRCS program tools. It should also help ranchers in South Texas make decisions about the forage suitability of several native grass species.

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